

### REMARKS

Claims 34-88 are currently pending in the instant application. Claims 34-48 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,940,776 (Baron et al.)(hereinafter, "Baron") in view of U.S. Patent No. 6,275,774 (Baron Sr. et al.)(hereinafter, "Baron Sr."). Claims 46-83 are rejected in view of these patents and various Official Notices claimed by the Examiner. Claims 34, 61, 75 have been amended herein for clarity and to more clearly define the invention that Applicant wishes to claim.

#### Baron

Baron teaches an automated, real-time weather graphics-generating system and method for receiving at a first site (e.g., local television broadcasting station), meteorological data from a plurality of meteorological data sources and then multiplexing that data onto a signal for television broadcast signal transmission and reception to remote sites (e.g., local cable service provider (CSO)), wherein the data is filtered from the television broadcast signal at the remote site and then combined with geographical views to form weather images comprising the meteorological data. The weather images can be further converted into a television-broadcast format for transmission to subscribers (e.g., CSO subscribers)(Baron, *Abstract*; FIG. 1). It will be appreciated that this service is similar to that provided by cable channels such as *The Weather Channel* and their affiliates.

With particular reference to FIG. 1 and the accompanying description, the system 10 is implemented in part at a local television broadcast station 12 and in part at a local cable service provider 14. (Baron, Col. 5, lines 28-30). The local television broadcast station 12 includes a host computer 16 that is in communication with a plurality of weather data sources 18 (*Id* at lines 30-32). The weather data sources 18 shown in FIG. 1 include a National Weather Service (NWS) weather wire message service, a lightning strike data service, and radar, and may utilize one or more methods of communication such as satellite downlinks, cellular data, Internet, or landline network although, according to Baron, the radar data source 18 is typically located at or near the local television broadcast station 12, and therefore, is connected directly to the host computer 16 over a network connection. (*Id* at lines 34-44). The received meteorological data is processed at the host computer 16 by a host program 20, the latter of which receives the meteorological data from the different weather data sources 18 and outputs a single serial data stream that is sent to a vertical blanking interval (VBI) inserter 21 for insertion into the vertical blanking interval of a standard television broadcast signal. (*Id* at lines 61-65). The signal is then transmitted or broadcast via broadcast antenna 40 to the local cable service provider 14, where it is received via television antenna 50 and then sent to a VBI receiver 52. The VBI receiver 52 separates the serial data stream of multiplexed meteorological data from the television broadcast signal and

sends the serial data stream to a remote computer 54 via link 55. (*Id.* at Cols. 6-7, lines 63-67; 1-9). The television broadcast signal is sent to a cable headend of the local cable service provider 14 via link 56. The remote computer 54 also receives meteorological data such as wind direction, wind speed, solar radiation levels, inside temperature, outside temperature, relative humidity, barometric pressure, daily rainfall, and monthly rainfall from other local sensors such as a local sensor pack 57. (*Id.* at Col. 7, lines 9-18). Remote computer 54 receives the serial data stream from the VBI receiver 52, the local meteorological data from the local sensor pack 57, and any external commands received over the PSTN 58, and then combines the meteorological data with image maps of geographical and topographical features to create weather images. The weather images are then converted by a scan converter 62 from a display standard such as visual graphics array (VGA) to a television standard such as NTSC or PAL for broadcast to cable subscribers over dedicated channels. (*Id.* at lines 24-24).

#### Argument

The Examiner states that Baron in view of Baron Sr. teaches at least Applicant's claimed invention set forth in claims 34, 36, 75, and 77. More specifically, he states that the plurality of weather data sources 18 are equivalent to Applicant's monitoring station and that the local CSO 14 is equivalent to Applicant's base station. The Examiner acknowledges that Baron does not explicitly teach the production switching means of Applicant's claimed invention, but such teaching is found in Baron Sr., and that it would be obvious for one of skill in the art to combine the two references to modify Baron according to the teachings of Baron Sr. to arrive at Applicant's claimed invention. Applicant respectfully traverses the rejection of these claims for at least the following reasons.

First, it will be appreciated that the Examiner ignores that Baron specifically states that, unlike Applicant's invention, both a local television broadcast station 12 and a local cable service provider 14 are necessary in order to effect the system and method of his invention. (*Baron*, Col. 5, lines 28-30). Applicant's claimed invention is not so limited. As will be shown below, this contrived construct would make Baron inoperable for its intended purpose and thus improper.

Additionally, claims 34, 61, and 75 of the instant application set forth that Applicant's system integrates data representing weather parameters prevailing at a plurality of geographic locations *into television broadcast signals originating from and related to the plurality of geographic locations* (emphasis added). As seen with reference to FIG. 1 and the accompanying description in Baron, the local television broadcast station 12 and the accompanying television broadcast signals do not originate from the same plurality of geographic

locations as the weather data sources 18, but rather receives such data from various locations depending on the data being received.

Furthermore, under the Examiner's construct of Baron (i.e., that Baron's plurality of weather data sources 18 are equivalent to Applicant's monitoring station and that the local CSO 14 is equivalent to Applicant's base station (*Office Action dated December 14, 2005, p.2*)), Baron does not teach Applicant's claimed invention, and in fact teaches away from same. A review of the independent claims 34 and 61 reveals that the monitoring station and base station of Applicant's claimed invention respectively include "*means for transmitting the weather parameter signals from the monitoring station*" and "*means for receiving the weather parameter signals from the monitoring station*." (Claim 75 contains a similar limitation of a step of "*transmitting the weather parameter signals from the monitoring station to a base station*"). According to the Examiner's construction, this would mean that the local CSO 14 would have to receive the weather signals from weather data sources 18. However, as shown in FIG. 1 of Baron, the weather signals are not received from weather data sources 18, but instead received from local television broadcast station 12 via antenna 40, after the data from weather data sources 18 has been appropriately processed and conditioned for broadcast. Examiner's construct would mean that the weather signals from weather data sources 18 would be sent to local CSO 14 prior to conditioning for broadcast (i.e., insertion in the vertical blanking interval of a standard television broadcast signal). Such signals would not be recognizable by CSO 14. As such, the system of Baron would be rendered inoperable for its intended purpose and thus, the Examiner's construct is impermissible. Baron Sr. does not render this construction permissible.

Moreover, even were one to modify the Examiner's construct so that the local television broadcast station 12 were deemed equivalent to Applicant's monitoring station, Baron would still teach away from same, because claims 34 and 61 require that the monitoring station be "*located at each of the plurality of geographic locations*," (likewise, claim 75, as amended herein, includes a step of monitoring weather conditions at each of the plurality of geographic locations through monitoring means), and it is clear that the local television broadcast station 12 of Baron is not co-located with each of the plurality of geographic locations that is being monitored. (*See, Baron, FIG.1 and accompanying description. See also, supra*). Baron Sr. also does not teach or suggest this.

Finally, Applicant has amended claims 34, 61, and 75 to clarify that an advantage of the monitoring station is that it is portable. Support for this amendment may be found at page 4 of the subject application:

One key advantage of the wireless embodiment of system 10 is the mobility of provided by the base station 16 and the monitoring station 14. In an illustrative embodiment, the monitoring station 14 is...light enough to be carried manually...."

Under neither of the constructions above (i.e., where weather data sources 18 or local television broadcast station 12 is deemed equivalent to Applicant's monitoring station) can it be said that the 'monitoring station' of Baron is portable. Baron Sr. does not teach or suggest portability of a monitoring station.

For the all of the foregoing reasons alone, the Examiner's rejection cannot stand, and independent claims 34, 61, and 75 are patentable over the cited art of record. As claims 35-60, 62-74, and 76-88 are dependent directly or indirectly therefrom, they, too, are patentable over such art.

In addition, the Examiner also fails to point out how and/or where the Baron and Baron Sr. references teach at least two of the elements of claim 34.

As stated above, the Examiner acknowledges that Baron does not explicitly teach the production switching means of Applicant's claimed invention, but such teaching is found in Baron Sr. The Examiner then refers to Col. 3, lines 6-16 and Col 4, lines 47-62. The latter section sets out the following:

With reference to FIG. 1, a system 10 for providing real-time site specific weather information in accordance with the present invention is illustrated. The system 10 comprises a weather alert manager 12, a distribution network 14, and a plurality of remote units 16. Briefly stated the system 10 receives meteorological data including weather information for a geographic area which is relevant to one or more of the remote units 16. The meteorological data is processed to generate storm profiles for the storms within the meteorological data. The storm profiles are distributed to the respective remote units 16 by the distribution network 14. In response to the storm profiles, the remote units provide weather information that is relevant to a specific geographic area predefined for each remote unit 16. Accordingly, an end user is able to receive site specific weather information that is highly relevant.

As seen in Figure 1, weather alert manager 12 is a computer, and while the distribution network 14 may be a cable network, it is unclear to Applicant how this is equivalent to Applicant's "production switching means" of claim 34:

production switching means for receiving the television signals representing the weather parameters and the television broadcast signals, and for combining the television signals representing the weather parameters and the television broadcast signals so that first icon signals representing first weather parameter signals sensed at a first geographic location are combined with first television broadcast signals from the first geographic location, and so that second icon signals representing second weather parameter signals sensed at a second geographic location different from the first geographic location are combined with second television broadcast signals from the second geographic location

Furthermore, the Examiner does not point to any teaching in either the Baron or Baron Sr. reference of Applicant's claimed limitation of means coupled with the production switching means for selecting an output television signal corresponding to either the first icon signals representing the first weather parameter signals sensed at the first geographic location combined with the first television broadcast signals from the first geographic location or the second icon signals representing the second weather parameter signals sensed at the second geographic location combined with the second television broadcast signals from the second geographic location.

For these additional reasons, the Examiner's rejection of independent claim 34, and dependent claims 35-60, cannot stand, and these claims are therefore patentable over the cited art of record.

A number of the dependent claims are separately patentable for reasons in addition to those set forth above. Only some of these will be presented below for brevity's sake, and Applicant is not waiving later assertion of separate patentability for additional reasons and/or additional claims.

For example, claims 35 and 76 require that the television broadcast signals are live video signals including portions which can vary responsive to the weather parameters prevailing at the geographic locations. The Examiner merely refers to his rejection of claims 34, 36, 75, and 77 in rejecting these claims. However, while Baron teaches that the television broadcast signals are live video signals, there is no teaching or suggestion that portions of these signals can vary *responsive* to the weather parameters. (E.g., in Applicant's invention the wind speed icon changes in response to the wind speed signal).

Claim 36 sets forth that the sensing means of 34 includes means for sensing wind direction prevailing at the plurality of geographic locations and for generating wind direction signals representing the sensed wind direction, and means for sensing wind speed prevailing at the plurality of geographic locations and for generating wind speed signals representing the wind speed. (Claim 77 contains a similar limitation). The Examiner is silent in his rejection of these claims, merely referring back to his rejection of claims 34 and 75, respectively. The only teaching in Baron of these features is in local sensor pack 57 of Baron. Applicant would note that there is not much detail given with respect to this device (i.e., what is meant by "local?" Local to CSO 14? Local to the local television broadcast station 12? Local to each or some of the weather data sources 18?). In any event, Applicant's claimed invention sets forth that the means for sensing the wind direction is located in the monitoring station. Conversely, the local sensor pack 57 of Baron is part of CSO 14. Thus Baron does not teach or suggest this element and, in fact, teaches away. Baron Sr. does not make up for this silence.

Similarly, the Examiner rejects claims 40 and 79 over Baron. Claim 40 requires that the icon signal generating means is simultaneously responsive to the wind direction signals, to create a wind direction icon signal representing a wind direction icon, and to the wind speed signals, to create a wind speed icon signal representing a wind speed icon. (Claim 79 contains a similar limitation). The Examiner refers to the local sensor pack 57 of Baron as teaching this limitation but, again, no much information is given with respect to this device. However, Baron does state the local meteorological data from the local sensor pack 57 is combined with the serial data stream from the VBI receiver and external commands received over the PSTN 58 and then combined with image maps of geographical and topographical features to create weather images 52 (*Baron*, Col. 7, 24-30). This indicates that the only graphical image that is added are the geographical and topographical image maps. There is no other indication that wind direction icon signals or wind speed icon signal are created. Baron Sr. also does not teach or suggest this feature.

The Examiner further rejects claim 41 for the same reason claims 34, 36, 75, and 77 are rejected and gives no additional reasons. However, while Baron implicitly indicates that weather parameters at a plurality of geographic locations are continuously monitored, neither Baron nor Baron Sr. teach or suggest Applicant's claimed limitation that they are continuously monitored so that changes in the weather parameters can be matched with changes in the television broadcast signals.


In rejecting claim 52, the Examiner states that a microcontroller including operator interface means coupled with the microcontroller is taught with respect to monitor 28 in FIG. 2. FIG 2 shows local television broadcast station 12, and monitor 28 is a monitor therein. Applicant's claimed microcontroller (and thus operating interface means) are within the monitoring station. If the Examiner deems that the weather data sources 18 are equivalent to Applicant's monitoring station, then the rejection of this claim cannot stand. Further, for the reasons set forth above, neither the local television broadcast station 12 nor the weather data sources 18 can be deemed equivalent to Applicant's monitoring station, and for this additional reason, the rejection of claims 52 (and additional dependent claims 53-60) cannot stand. Similar reasoning applies to claims 66-73.

In view of the foregoing amendments and for the above-stated reasons, Applicants submit that claims 34-88 are allowable over the prior art of record, and that the application is in condition for allowance. It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests prompt and favorable consideration of this Response including

Amendment and reconsideration of the application on whole. An early Notice of Allowance is also respectfully solicited. Should the Examiner believe that personal communication would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (215) 986-5169.

Respectfully submitted,

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